ABSTRACT OF THE DISCLOSURE

Multiple levels of interrupts to be utilized, which allows, for example, an interrupt with an interrupt level associated with an application to be distinct from an interrupt with an interrupt associated with a kernel. The kernel level interrupt may be handled quickly via its own handler, while a user-level interrupt may be handled more slowly. This may be accomplished by first determining if a first-level handler is installed for the interrupt source. If so, then it may be called. Otherwise, the interrupt source may be masked and a second-level handler may be called. Once this second-level handler has completed its tasks, the interrupt source may then be unmasked. Implementations with three or more levels of interrupt are also possible.